	Type	L #	Hits	Search Text	DBs	Time Stamp
1	BRS	L1	1	(steve and fong).in.	USPAT	2001/04/27 11:02
2	IS&R	L2	6	(("4825277") or ("4960727") or ("6028789") or	USPAT	2001/04/27 11:14
3	BRS	L4	4	("6064595") or ("621570 (zhao and randy).in.	USPAT	2001/04/27 11:07

providing party is made by means of a name or a short code. Once selected, the selected party is checked in an automatic authorization procedure to verify that the user has selected a party recognized by the system, as shown at logical block **220**. If the result is negative, an error message is displayed and system flow returns processing back to logical block **220**. If the result is affirmative, processing flow proceeds to the logical block **224**, as shown. At the logical block **224**, a test is performed to determine whether the selected party is actively available and, if not, an error message and a prompt for reentry is generated and transmitted to the user, as indicated at functional block **226**.

If the result at the logical block **224** is affirmative, a test is performed to determine whether the selected party is one who accepts contacts from any callers, or only selected callers, as shown at logical block **228**. If the result at block **228** is that the selected party only responds to authorized callers, the processing proceeds to logical block **230** which tests to determine if the caller is an authorized party. If the result at logical block **230** is negative, the system generates an error message and terminates the selected service session producing an exit from the SIGN-IN function, as shown at block **238**. If, however, the result at logical block **230** is positive, meaning that the user is authorized to contact the selected party, then a billing code is assigned, as shown by functional block **234**, to permit identifying and billing of charges for the system **50** services provided. After the billing code is established, the processing flow proceeds to functional block **236** where the user selects a desired function, and the type of connection required is established (utilizing an ESTABLISH CONNECTION function described in detail hereinafter with reference to FIG. **9**). The SIGN-IN routine is subsequently exited as shown at block **238**.

An ESTABLISH CONNECTION function is illustrated in the flow chart of FIG. **9** which illustrates the processing methodology and structural flow for a specific embodiment of the ESTABLISH CONNECTION function as shown in FIG. **8**. The ESTABLISH CONNECTION function begins at block **166** where the user selects a desired function to be performed by the previously selected party. Subsequently a logical operation **168** is performed to determine whether the function is served locally or remotely, as shown. If the result at logical block **168** is negative, a logical operation **170** is performed to determine if a batch mode operation is to be performed. If the result at logic block **170** is negative, an interactive exchange made with a remote computer is enabled, as indicated at functional block **172**. If the result of logic operation **170** is positive, then a mode of operation that accumulates transaction records for batch transfer based on a desired standard at a later time is enabled, as indicated at functional block **174**. In both cases, once the appropriate mode of operation is enabled, the ESTABLISH CONNECTION function is terminated and exited as shown by block **186**.

If the result of the logic operation **168** is affirmative, a logical operation **176** is performed to determine whether the data base to be accessed is a local, full data base. If the result is negative, a logical operation **178** is performed to determine whether the data base is a local, partial data base. If the result of the logical operation **178** is negative, then an interactive transaction process is enabled for accessing a remote data base, as illustrated by functional block **180**. If the result of the logic operation **178** is affirmative, then an interactive process is enabled, and transactions are accumulated to be periodically batch transmitted to the remote data base. In this mode, a partial data base is downloaded periodically to the central processor from the remote data base. If the result of the logic operation **176** is affirmative, then a completely interactive process is enabled, with immediate confirmation of transactions, as shown by functional block **184**. In both block **182** and block **184**, the mode of operation enacted is interactive, using only a local data base for validation and confirmation of a transaction. In both cases, the local data base immediately amended to reflect the processed transaction. However, in the mode enacted in block **184**, where the entire data base is locally maintained, the amended data base is the primary source of information. In the mode enacted in block **182**, where the local data base is a secondary partial image of a primary base managed elsewhere, the local data base is downloaded periodically from a remote site. The transactions that are processed locally are accumulated in addition in a separate transaction file and are then transferred periodically to the remote primary computer for updating. The ESTABLISH CONNECTION routine is terminated and exited after either block **184** or block **182**, as illustrated by block **186**.

Once the SIGN-IN function has been completed and exited, the user is then enabled to proceed with the selected service. However, having once entered a particular service function, the user is able to jump to other functions and override menus, thereby permitting an experienced user to move from any point within the routing tree to any other selected point without having to go through all menu options. Thus, a service selection SHORTCUT function may be activated at any time by a go-to command, formatted to optionally indicate at least the function, the party desired, and any necessary password. The go-to command initiates a service selection SHORTCUT function as illustrated by the flow diagram of FIG. **10**. The service selection SHORTCUT function is entered as shown at block **240**, and is activated as shown at logical block **242** via a logical operation which determines whether the go-to command (which may be a character such s ">") has been initiated. The go-to command may have a format, for example, as follows: "go-to, function name, selected party name or code, password, character string". If the result at logic operation **242** is negative, the SHORTCUT function is exited as illustrated by block **260**.

If the go-to command is present, processing proceeds to logical block **244**, where the logic operation determines whether the function indicated is recognizable by the system. If the result of the logic operation **244** is negative, an error message is generated and a prompt for re-entry is provided to the user as shown by functional block **246**. If the result of the logic operation **244** is affirmative, the system performs a logical operation to determine whether the selected party exists and is recognized by the system, as illustrated at logical block **248**. If the result of the logical operation **248** is negative, an error message is generated and a prompt for re-entry is provided to the user, as illustrated at functional block **250**, after which processing flow returns to block **248**, as shown. If the result at logical operation **248** is affirmative, the system determines whether a password is required as shown at logic block **252**. If the result of the logical operation **252** is affirmative, a password is requested of the user and checked to determine if it is correct, as indicated at logical block **254**. If the result of